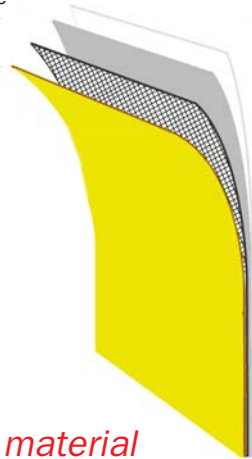


# Product sheet - Trellchem® VPS type T-ET

Trellchem® VPS type T-ET provides protection against hazardous chemicals in liquid, vapour, gaseous and/or solid form and is designed to carry the breathing apparatus outside the suit. The Trellchem® VPS type T-ET is made of the same garment material as the Trellchem® VPS type TE, which is fully certified to the American Standard NFPA 1991. The Trellchem® VPS type T-ET is fully certified in accordance with the the general European standard for gas-tight chemical protection, EN 943-1, as well as the standard for emergency teams (ET), EN 943-2.

Barrier film laminate  
Chloroprene rubber  
Polyamide fabric  
Chloroprene rubber



## Garment material

Strong and flexible polyamide fabric coated on the outside with chloroprene rubber. On the inside it is coated with chloroprene rubber and a barrier film laminate.

## Seams

Butt seam stitched with an *aramide* thread. Covered on the outside with a chloroprene rubber strip and on the inside with a welded-on barrier film laminate strip.

## Footwear

Integrated socks/booties in the garment material. Also, one pair of silicone coated oversocks is supplied with the suit to ease the donning (=lower the friction) of the safety boots. Alternatively, the suit is supplied with fixed nitrile rubber safety boots, certified according to EN 345-2.



## Gloves

The standard glove assembly consists of two layers. The inner glove (size 10), which is made of a silver coloured barrier film laminate, is fixed to the suit by a "snap-on" arrangement for easy replacement. The outer glove (size 11) is made of a special flame retardant chloroprene rubber. It is semi-attached to the suit by an elastic band. Alternatively the suit can be delivered with semi-fixed attached Viton®/butyl rubber gloves in combination with wrist cuffs for increased safety. A pair of separate thin inner comfort gloves of cotton is always supplied with the suit.



## Face sealing

The rubber face sealing is anatomically designed for optimum safety and comfort.

## Zipper

Long Viton® rubber coated gas-tight zipper (with the metal parts on the inside of the suit) placed diagonally on the front of the suit for easy donning and doffing. The zipper is closing downwards to give the wearer the possibility to check the zipper position (closed/open) and to reach the zipper handle himself. Also, the zipper is protected by an external splash protective flap.



## Ventilation

The suits are as standard equipped with an integrated possibility for ventilation. The flow rate can be adjusted by the wearer from the outside by a handle on the inlet regulating valve. Standard flow rate approx. 2 alt. 30 l/min (optional approx 30 alt. 100 l/min). The over pressure is automatically controlled by means of a membrane valve, which is protected by a separate splash protection.



	XS	S	M	L	XL	XXL
Sock	41/7½	43/9	43/9	46/11	47/12	47/12
Nitrile boots	41/7	41/7	43/9	45/10	46½/11½	46/11½

## Standard size range

Option of XS, S, M, L, XL and XXL.

Size	Wearer's height (cm)
XS	164-176
S	170-182
M	176-188
L	182-194
XL	188-200
XXL	200-212

## Accessories supplied with each suit

Each suit is delivered with 1 pair of separate cotton comfort inner gloves, 1 pair of separate outer special HPS/VPS chemical protective rubber gloves (alternatively with separate outer Viton®/butyl rubber gloves) incl. 1 pair of elastic bands, 1 coat hanger type T, 1 grease stick for lubrication of the zipper and 1 comprehensive manual with technical data. Each suit in sock version is delivered with 1 pair of separate silicone over socks.

## Trellchem® Hood

The Trellchem® Hood is one of many accessories that are available. It is required to be worn for the EN 943 approval to be valid.



## Standards

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## References

Trellchem® suits are in world-wide use by leading hazmat, rescue and fire fighting teams, armed forces, military defence, civil defence as well as in the industry.

## PERMEATION TEST RESULT ACCORDING TO THE NFPA STANDARD 1991 / ASTM F 739 (0,1 µg/cm<sup>2</sup>\*min.)

Chemical	BT Time (min)	Chemical	BT Time (min)
Acetic anhydride	> 480	*Hydrogen chloride	> 480
*Acetone	> 480	Isoprene	> 480
*Acetonitrile	> 480	JP-4	> 480
Acetyl chloride	> 480	*Methanol	> 480
Acrylic acid	> 480	*Methyl Chloride	> 480
*Anhydrous ammonia	> 480	Methyl Isocyanate	> 480
Aniline	> 480	Methyl ethyl ketone	> 480
Bromine	330	Methyl metacrylate	> 480
*1,3-Butadiene	> 480	Monochlorobenzene	> 480
Butylamine	> 480	Nitric acid 70 %	> 480
*Carbon disulfide 95%	> 480	*Nitrobenzene	> 480
*Chlorine	> 480	Nitromethane	> 480
Chloroform	> 480	Oleum 30%	360
Chlorosulfonic acid	270	Phenol 85%	> 480
*Dichloromethane	> 480	Phosphoric acid 85 %	> 480
*Diethyl amine	> 480	Phosphorous trichloride	> 480
Diethyl ether	96	Pyridine	208
*Dimethyl formamide	> 480	*Sodium hydroxide 40%	> 480
Dimethyl hydrazine	> 480	Styrene	216
Dimethylsulfoxide	> 480	*Sulphuric acid 98%	> 480
Epichlorohydrine	> 480	*Tetrachloroethylene	> 480
*Ethyl acetate	> 480	*Tetrahydrofuran	> 480
Ethylene glycol	> 480	Thionyl chloride	-
*Ethylene oxide	> 480	*Toluene	> 480
Formaldehyde 37%	> 480	Tribromophenol	> 480
Formic acid 96%	> 480	Trichloroacetic acid	> 480
Furfural	> 480	Trichloroethylene	> 480
*Hexane	> 480	Triethylamine	> 480
Hydrazine	> 480	Triethylenetetramine	> 480
Hydrochloric acid 37 %	> 480	Vinyl acetate	> 480
Hydrofluoric acid 48 %	> 480	Vinyl chloride	> 480

\* NFPA 1991 chemical test battery

BT=Breakthrough

Underlined chemicals=EN 943-2 chemical test battery



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